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No. 99-1426

# In the Supreme Court of the United States

AMERICAN TRUCKING ASSOCIATIONS, INC., ET AL.,
*Cross-Petitioners*

*v.*

CAROL M. BROWNER, ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY, ET AL.,
*Respondents*

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On Writ of Certiorari to
The United States Court of Appeals
For the District of Columbia Circuit

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## BRIEF FOR RESPONDENTS MASSACHUSETTS AND NEW JERSEY

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## QUESTION PRESENTED

Whether the court of appeals properly reaffirmed the longstanding principle that, in setting and revising National Ambient Air Quality Standards under Section 109 of the Clean Air Act, the Environmental Protection Agency may not consider the costs of implementing measures to attain the standards.



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## BRIEF FOR RESPONDENTS MASSACHUSETTS AND NEW JERSEY

Both this case and *Browner v. American Trucking Associations, Inc.*, No. 99-1257, to be heard in tandem, arise out of challenges brought by cross-petitioners to the EPA's promulgation of revised National Ambient Air Quality Standards (NAAQS) for particulate matter (PM) and ozone. Both cases, moreover, concern the validity of EPA's construction of the Clean Air Act that underlies the revised PM and ozone NAAQS. In No. 99-1257, cross-petitioners (filing there as respondents) contend that EPA's construction of the Clean Air Act violates the nondelegation doctrine. In this case, cross-petitioners contend that the Clean Air Act itself bars EPA's longstanding position that the statute precludes the agency from considering costs in setting the NAAQS.

Cross-petitioners seek to link the two cases by claiming that the source of the Clean Air Act's constitutional infirmity is EPA's refusal to interpret the Act to allow for the consideration of costs in setting the NAAQS. Cross-petitioners thus attempt to persuade this Court to reject EPA's interpretation of the Act by invoking the canon that courts should construe statutes so as to avoid invalidating them on constitutional grounds.

In our brief filed in No. 99-1257, however, we have established the absence of any merit to cross-petitioners' claim of undue delegation. Brief of Respondents Massachusetts and New Jersey, *Browner v. American Trucking Assns.*, at 20-24 (MA & NJ Br.). Because cross-petitioners have so closely linked their statutory argument in this case to their constitutional argument in No. 99-1257, the former should fall based on the weakness of the latter. A wholly insubstantial constitutional argument can never be a legitimate basis for rejecting an otherwise valid agency statutory interpretation. But that is especially so where, as in this case, cross-petitioners' proffered interpretation would not avoid the constitutional problem as they see it.

There are, moreover, no other possible bases for upsetting

EPA's unbroken position that the Clean Air Act allows both EPA and the States to consider costs in implementing the NAAQS, but does not allow EPA to consider costs in setting the NAAQS in the first instance. The plain meaning of the statutory language permits no other conclusion. And, contrary to the gloomy exaggerations of cross-petitioners and their supporters, the many decades of federal air pollution regulation confirm the wisdom of Congress's deliberate and carefully crafted choices about precisely how costs should be considered in protecting the quality of the nation's air.

## STATEMENT

### A. Statutory and Regulatory Background

The NAAQS form the centerpiece of the Clean Air Act. They protect public health by governing the quality of the nation's outdoor air. These standards are not, however, self-implementing; they do not themselves directly apply to any source of air pollution. They apply instead directly only to those federal and state governmental authorities responsible for ensuring that the standards are met. For that reason, while the NAAQS are "standards" in name, they are more akin to statutory policy objectives in their actual operation.

Federal and state authorities are statutorily obliged to develop a series of implementing measures designed to achieve compliance with the NAAQS. The Clean Air Act itself mandates some of those implementing measures and their respective timetables. The design and application of other implementing measures are left to the discretion of the appropriate federal or state governmental authority.

A fundamental distinction between the statutory factors relevant to the *setting* of a NAAQS and the statutory factors relevant to *implementing* measures designed to achieve a NAAQS is central to the operation of the Act. Congress deliberately and carefully decided to apply different



requirements to the very different regulatory tasks of setting regulatory objectives and designing implementing measures. In particular, Congress concluded that while costs and related practicality and feasibility concerns should be considered in a variety of ways in implementing the NAAQS, they should not be considered in setting them.

During the last three decades of experience with the Clean Air Act, Congress has steadfastly maintained that essential distinction. Congress has repeatedly amended the Act in both isolated and more sweeping ways to provide for more or less consideration of costs and feasibility in aspects of the statute concerned with implementation of the NAAQS. These changes sometimes reflect congressional response to new knowledge and, other times, simply to changing political priorities. Yet, throughout these same thirty years, many of which were marked by considerable controversy over the costs of environmental protection, Congress has not once altered the basic format for setting the NAAQS, a format that from the very beginning has excluded the consideration of costs.

#### 1. Setting the NAAQS

Sections 108 and 109 of the Clean Air Act require the Administrator of EPA to establish and periodically revise NAAQS for a limited subset of air pollutants. *See* 42 U.S.C. 7408-7409. Section 108 provides that NAAQS may be set only for air pollutants that "cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare" and "the presence of which in the ambient air results from numerous or diverse mobile or stationary sources." *See* 42 U.S.C. 7408(a)(1)(A)-(B). Accordingly, the Administrator may regulate a pollutant under the NAAQS program only if she first finds that its widespread presence in the ambient air poses a threat to public health or welfare.

The Clean Air Act provides for the establishment of both "primary" and "secondary" NAAQS. The essential distinction

between the two is that primary NAAQS "protect the *public health*" while secondary NAAQS "protect the *public welfare*." More particularly, Section 109(b)(1) of the Act defines the primary NAAQS as:

> ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, *based on such criteria* and allowing an adequate margin of safety, are requisite to protect the public health.

42 U.S.C. 7409(b)(1) (emphasis added). A secondary NAAQS is defined as:

> a level of air quality the attainment and maintenance of which in the judgment of the Administrator, *based on such criteria*, is requisite to protect the public welfare from any known or anticipated effects associated with the presence of such air pollutant in the ambient air.

42 U.S.C. 7409(b)(2) (emphasis added). For each standard, therefore, the Act directs the Administrator to exercise her "judgment" based on specific "criteria" with the added requirement for primary NAAQS that the Administrator also allow for "an adequate margin of safety."

Section 108(a)(2) further details the precise content of the air quality "criteria" on which the NAAQS must be based. These criteria must:

> reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health and welfare which may be expected from the presence of such pollutant in the ambient air, in varying quantities.

42 U.S.C. 7408(a)(2). Thus, the only "effects" that are relevant under the prescribed criteria are those expected from the pollutant's "presence . . . in the ambient air."

Finally, Section 109(d)(1) of the Clean Air Act directs the Administrator to review the criteria and NAAQS every five years. 42 U.S.C. 7409(d)(1). Based on this review, the Administrator may promulgate a new NAAQS or revise an



existing one. 42 U.S.C. 7409(a)(1). The criteria relevant to the decisions whether and how to revise an existing NAAQS are the same as the criteria, described in section 108, for establishing a NAAQS in the first instance. *Id.*

### 2. Implementing the NAAQS

A NAAQS does not, standing alone, directly regulate any source of air pollution. It instead simply establishes a statutory objective that the Clean Air Act makes federal and state governmental regulatory authorities responsible for achieving within a series of prescribed timetables. Hence, while Sections 108 and 109 govern the *setting* of NAAQS, including their subsequent revision, other Clean Air Act statutory provisions govern the *implementation* of the NAAQS.

Section 110 of the Act, for instance, provides for the development by states and, if necessary, by the federal government, of state or federal "implementation plans" (SIPs or FIPs) that provide for the "implementation, maintenance, and enforcement" of NAAQS throughout each state. 42 U.S.C. 7410(a)(1). While section 110 details a host of requirements for these plans, including the control of stationary sources "as necessary to assure that [NAAQS] are achieved[,]"[1] the overarching requirement is that the implementation plan, as a whole, make the necessary progress toward NAAQS compliance. "Perhaps the most important forum for consideration of claims of economic and technological infeasibility is before the state agency formulating the implementation plan. So long as the national standards are met, the State may select whatever mix of control devices it desires, . . . and industries with particular economic or technological problems may seek special treatment in the plan itself." *Union Electric Co. v. EPA*, 427 U.S. 246, 266 (1975).

Other provisions of the Clean Air Act specifically concerned

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[1] 42 U.S.C. 7410(a)(2)(C).

with implementation, moreover, expressly provide for the consideration of costs. For instance, section 111 provides for EPA's promulgation of technology-based standards of performance applicable to new stationary sources of air pollutants, including pollutants governed by the NAAQS. Those performance standards must "tak[e] into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements." 42 U.S.C. 7411(a). Federal emissions standards applicable to mobile sources and aircraft, many of which emit NAAQS pollutants, likewise mandate taking costs into account. *See* 42 U.S.C. 7521(a)(3)(A)(i); 42 U.S.C. 7571(b).

The nonattainment provisions of the Clean Air Act, which apply to those parts of the nation not yet in attainment with NAAQS, similarly reflect significant attention to costs and technological feasibility. The touchstone for "nonattainment plans" designed to achieve the NAAQS is "reasonableness" in the form of "reasonable further progress" towards attaining the NAAQS. 42 U.S.C. 7501(1), 42 U.S.C. 7502(c)(2). The Act does not require the immediate attainment of the NAAQS, regardless of the economic costs of such a requirement, notwithstanding the passage long ago of previous statutory deadlines. Nonattainment plans must instead provide for "reasonably available control measures" and new and modified major stationary sources must, among other things, achieve the "lowest achievable emission rate," which explicitly excludes limitations "that are not achievable." 42 U.S.C. 7502(c)(1), 7503(a)(2), 7501(3)(A). The Act also allows EPA to construe the term "source" for the purposes of these nonattainment requirements to allow a facility to avoid costlier controls by reducing air pollution in one part of a manufacturing site more than it increases pollution in another part of the site. *See Chevron U.S.A. v. Natural Resources Defense Council*, 467 U.S. 837, 866 (1984).



### 3. History of the Clean Air Act and NAAQS Program

The Clean Air Act today embodies no fewer than eleven separate Acts of Congress, stretching back over fifty years.[2] A central part of the legislative debates surrounding each of these enactments has been the extent to which regulatory objectives should turn on public health and welfare concerns as well as the extent to which the regulatory means of achieving those objectives should turn on considerations of economic cost or technological feasibility. With regard to implementation, Congress has made numerous extremely precise and significant refinements in the statutory language relating to where, when, and to what extent costs should be relevant in establishing pollution control requirements applicable to individual sources of air pollution. By contrast, Congress has, for three decades, steadfastly adhered to the fundamental position, reflected in sections 108 and 109 of the Clean Air Act, that any such cost considerations should not similarly play any role in the setting of the air quality criteria and standards that have always served as the objectives of federal air pollution legislation.

Congress first addressed the question of what "criteria" should be relevant to setting air quality standards in the original 1963 Clean Air Act.[3] The 1963 statute authorized the federal government-acting through the Secretary of the Department of Health, Education, and Welfare (HEW)-to establish "criteria" for air quality. 77 Stat. 392 § 3(c)(2). The language describing the scope and content of the original air quality criteria is strikingly similar to the corresponding language of the Clean Air Act today.[4] Although Congress used

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[2]*See* William H. Rodgers, *Environmental Law* 124 (2d ed. 1994).

[3]*See* Clean Air Act of 1963, Pub. L. No. 88-206, 77 Stat. 392.

[4]The statute provided:

> Whenever [the Secretary] determines that there is a particular air

the same term, "criteria," for both the scientific *information* on the consequences of air pollution and *standards* for air quality,[5] the goal of the standards was clear: the Secretary was to recommend to local, state, or interstate air pollution control agencies those standards which "in [the Secretary's] judgment may be necessary to protect the public health and welfare."[6]

In the Air Quality Act of 1967, Congress used language virtually identical to that in the 1963 Act in again directing the Secretary of HEW to establish air quality criteria.[7] The 1967 Act also introduced some of the language that now governs the NAAQS themselves: the Act directed the Secretary to issue "such criteria of air quality as in his judgment may be requisite for the protection of the public health and welfare."[8] Nevertheless, Congress continued to rely mostly on the states for the development of rules governing air quality (standards) while relying on the federal government for the development of the scientific documents on which the standards were to

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> pollution agent (or combination of agents), present in the air in certain quantities, producing effects harmful to the health or welfare of persons, the Secretary shall compile and publish criteria reflecting accurately the latest scientific knowledge useful in indicating the kind and extent of such effects which may be expected from the presence of such air pollutant agent (or combination of agents) in the air in varying quantities.

§ (3)(c)(2), 77 Stat. at 395; *cf.* 42 U.S.C. 7408(a)(2).

[5]*See* § 3(c)(3), 77 Stat. at 395.

[6]*Id.*

[7]The criteria were to reflect "the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on health and welfare which may be expected from the presence of an air pollution agent, or combination of agents in the ambient air, in varying quantities." Air Quality Act of 1967, Pub. L. No. 90-148, sec. 107(b)(2), § 2, 81 Stat. 485, 491.

[8]§ 107(b)(1), 81 Stat. at 491.



depend (criteria).

It was not until the Clean Air Amendments of 1970 that Congress provided the federal government with the exclusive authority to set nationally uniform standards for air quality. The states retained the task of implementing the air quality standards, but EPA–created during Congress's deliberations on the 1970 Amendments[9]–was directed to set the standards.[10]

With respect to the air quality *criteria*, Congress required for the first time that the criteria describe effects on "*public* health and welfare." Previously, it had required that criteria describe effects on the health and welfare "of persons"[11] or simply on "health and welfare."[12] Yet, while changing the language, Congress instructed EPA to base the very first NAAQS on HEW's existing criteria.[13] These criteria considered only the consequences for health and welfare of the presence of pollutants in the ambient air and they stressed the difficulties of drawing a bright line between pollution that is harmful and pollution that is not.[14] Congress in 1970 responded to the challenges of scientific uncertainty by further providing that the air quality standards protecting human health–the primary standards–must embody "an adequate margin of safety."[15]

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[9]*See* Reorg. Plan No. 3 of 1970, 5 U.S.C.A. App. (Supp. 1992).

[10]*See* Clean Air Amendments of 1970, Pub. L. No. 91-604, sec. 109, § 4(a), 84 Stat. 1676, 1679-80.

[11]Clean Air Act of 1963, Pub. L. No. 88-206, § 3(c)(2), 77 Stat. 392, 395.

[12]Air Quality Act of 1967, Pub. L. No. 90-148, sec. 107(b)(1), § 2, 81 Stat. 485, 491.

[13]*See* 42 U.S.C. 7409(a)(1)(A), 7409(b)(1).

[14]*See, e.g.*, National Air Pollution Control Administration (NAPCA), HEW, Guidelines for the Development of Air Quality Standards and Implementation Plans 16 (1969).

[15]Sec. 109(b)(1), § 4(a), 84 Stat. at 1679.

During the past thirty years, Congress has enacted numerous revisions to the Clean Air Act, most significantly in 1977 and 1990,[16] and Congress has considered and rejected many more proposed amendments to the Act.[17] The Act today "consumes 313 pages of the Statutes at Large, nearly ten times the length of the original Clean Air Act of 1970. . . "[18] Yet, in the face of all this ongoing legislative activity, Congress has left essentially untouched the fundamental "public health" and "welfare" basis long in existence for the development of air quality criteria and NAAQS. Then, as now, the NAAQS are to be based on "the kind and extent of all identifiable effects on public health and welfare which may be expected from the presence of such pollutant in the ambient air."

In sharp contrast, Congress has made a host of both targeted and sweeping revisions to the Act designed to address the extent to which economic costs and economic and technological feasibility should be relevant in establishing pollution control requirements to implement the NAAQS. For example, Congress added in 1977 and 1990 the detailed nonattainment provisions designed to provide areas not meeting the NAAQS with both more time and more guidance

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[16]Clean Air Act Amendments of 1977, Pub. L. No. 95-95, 91 Stat. 685; Clean Air Act Amendments of 1990, Pub. L. No. 101-549, 104 Stat. 2399.

[17]For example, Congress held extensive oversight hearings on the Clean Air Act just a few months after the D.C. Circuit in *Lead Industries Ass'n v. EPA*, 647 F.2d 1130 (D.C. Cir.), *cert. denied*, 449 U.S. 1042 (1980), upheld EPA's view that costs are irrelevant to the setting of NAAQS. *See Clean Air Act Oversight: Hearings before the Sen. Comm. Envt & Pub. Works*, 97th Cong., 1st Sess., pts 1&2 (1981). Of course, the proper role of costs in setting NAAQS arose in those hearings, *id.* at 85, yet the hearings produced no change in the NAAQS provisions.

[18]Rodgers, *Environmental Law*, *supra*, § 3.2, p. 140.



in achieving that statutory objective.[19]

Congress has also added a series of provisions allowing for specific exemptions and extensions based on economic concerns. For example, both the President of the United States and State Governors are allowed, in specified circumstances, to suspend statutory requirements based on concerns related to unemployment and plant closings. 42 U.S.C. 7410(f)(2), 7410(g)(1)(B). Congress has similarly provided relief from motor vehicle emissions standards, transportation control measures, and emission limitations applicable to certain manufacturing facilities.[20]

In sum, Congress has maintained a sharp distinction at least since passage of the Clean Air Act of 1970, if not long before, between the role of costs in the setting of the air quality standards that serve as the Act's overriding objective and the role of costs in developing the means for implementing those standards. Congress concluded early on that compliance costs should not be relevant to the former and has never disturbed its initial policy judgment. At the same time, Congress concluded that such costs should be relevant to the latter and has since repeatedly revisited precisely how to take such costs into account, in light of its ongoing experience with the Act's actual operation.

**B. Particulate Matter and Ozone Rulemakings**

In our brief on the merits in *Browner v. American Trucking Associations, Inc.*, No. 99-1257, we described EPA's rulemaking proceedings with respect to the PM and ozone NAAQS. MA & NJ Br. 20-24. That same description is equally relevant to

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[19]*See* 42 U.S.C. 7501-7515.

[20]*See* Energy Supply and Environmental Coordination Act of 1974, Pub. L. No. 93-319, §§ 4-5, 88 Stat. 246, 256-260; Steel Industry Compliance Extension Act of 1981, Pub. L. No. 97-23, 95 Stat. 139.

the issues in this case.

### C. Proceedings Below

In rejecting cross-petitioners' reading of the Clean Air Act, the D.C. Circuit reaffirmed its longstanding conclusion that the plain meaning of the Act forbids EPA from considering costs in setting the NAAQS. U.S. Pet. App. 19a.[21]

## INTRODUCTION AND SUMMARY OF ARGUMENT

The Clean Air Act's National Ambient Air Quality Standards (NAAQS) program is one of the signal success stories of American environmental law. Emissions of most of the pollutants regulated by the program have dramatically decreased in the thirty years that the program has been in place, despite substantial increases in the size of our population and in the amount of economic activity.[22] In a recent peer-reviewed, retrospective study of the Clean Air

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[21]The court also held that EPA had erred in declining to consider evidence that ground-level ozone is beneficial for people because it helps to counteract the adverse health effects caused by the decline in the ozone layer (itself caused by air pollution). U.S. Pet. App. 44a-49a. No one has sought review of this ruling.

[22]*See* Richard N.L. Andrews, *Managing the Environment, Managing Ourselves – A History of American Environmental Policy* 280 (Yale Univ. 1999) ("Emissions of particulate matter (smoke) dropped by nearly 80 percent from 1970 to 1994, for instance, and of lead by 98 percent, even as the U.S. population increased by 27 percent, its gross domestic product by 90 percent, and its vehicle use by 111 percent. Emissions of carbon monoxide and volatile organic compounds each dropped by over 20 percent, and sulfur by one-third; only nitrogen oxides increased.") (citing U.S. Council on Environmental Quality, *Environmental Quality: 25th Annual Report–1994-95*, 179, 182 (1997).



Act's first twenty years, the EPA concluded that the Act had produced almost 22 *trillion* dollars more in benefits than it had imposed in costs, and EPA believed that even this dazzling amount probably understated the benefits of the statute.[23] A widely cited survey of EPA managers conducted in the late 1980s concluded that the air pollution addressed by the NAAQS program should be ranked *first* on a list of environmental problems ranked according to the risks they posed to human health, welfare, and ecosystems.[24]

Cross-petitioners want to disrupt this successful regulatory regime. They ask this Court to hold, contrary to thirty years of agency and judicial precedent, that the Clean Air Act requires EPA to balance costs against benefits in setting the NAAQS. But in creating the NAAQS program, Congress was faced with the questions of whether to allow costs to play any role in this program and, if so, what role they should play. Congress ultimately chose to exclude the consideration of costs from the process of *setting* the NAAQS but to allow the consideration of costs in the process of *implementing* these standards.

1. The meaning of the Clean Air Act is plain, and has been settled for decades: costs may not be considered in setting the NAAQS. Sections 108 and 109 of the Act clearly direct EPA, in setting the NAAQS, to consider only the effects on public health and welfare of breathing polluted air. These provisions instruct EPA to base the NAAQS on air quality criteria that themselves discuss only the effects on public health and welfare of "the presence of [an air] pollutant in the ambient air." 42 U.S.C. 7408(a)(2). This instruction leaves no room for the consideration of costs. Were there any doubt on this point,

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[23]EPA, Office of Air and Radiation, *The Benefits and Costs of the Clean Air Act, 1970 to 1990* at ES-8 (Oct. 1997). This report focused almost exclusively on the consequences of regulating the criteria air pollutants. *Id.*

[24]U.S. EPA, *Unfinished Business: A Comparative Assessment of Environmental Priorities* 58 (1987).

however, it would be dispelled by the numerous provisions of the Act explicitly allowing or requiring the Administrator to consider costs in implementing the NAAQS; clearly Congress knew how to permit the agency to consider costs when Congress wanted to. For cross-petitioners to ask this Court to insert the word "costs" into sections 108 and 109 in the face of Congress's clear decision to exclude it is to request a large and unwholesome shift in the Court's approach to interpreting statutes.

Given the clarity of the statutory text, this Court should not distort the plain meaning of the Clean Air Act in order to avoid the constitutional issue of delegation. The error in rewriting a statute simply to avoid a constitutional issue is particularly pronounced where, as here, the resolution of the constitutional issue is, under this Court's precedents, straightforward and where, if anything, the proffered alternative interpretation(s) of the statute would not avoid the constitutional issue as cross-petitioners see it.

Cross-petitioners' inability to mount any convincing argument based on the language or history of the Clean Air Act forces them to ask this Court to adopt a special canon of construction tailor-made by them for this case: they ask the Court to hold that unless Congress *explicitly* prohibits the consideration of costs in a statute, costs must be considered. This is nothing other than an inappropriate plea to have this Court rewrite the Clean Air Act in order to further cross-petitioners' views on social policy.

2. The Clean Air Act is perfectly rational as written and as understood for three decades. Contrary to the excited claims of those challenging EPA's PM and ozone rules, the Act does not force this country to abandon industrial activity; it does not allow the Administrator privately to consider costs and publicly to deny it; and it reflects Congress's considered judgment concerning potential tradeoffs between regulatory costs and health. Finally, by precluding the consideration of costs in setting the NAAQS but by allowing such



consideration in implementing them, the Clean Air Act avoids one of the most troublesome features of the cost-benefit balancing cross-petitioners endorse: its tendency to underestimate the benefits of regulation and to overestimate the costs. This tendency also helps to explain what would otherwise be one of the great unsolved mysteries of the regulatory state: how a set of standards set without regard to cost can, even from the perspective of cost-benefit analysis, become one of the great success stories of environmental law.

## ARGUMENT

### I. THE PLAIN MEANING OF THE CLEAN AIR ACT PRECLUDES EPA FROM CONSIDERING COSTS IN SETTING THE NAAQS

Cross-petitioners and their supporting respondents and amici offer a dizzying array of possible interpretations of the Clean Air Act.[25] The proffered interpretations do, however, have one thing in common: all of them would import some kind of balancing of costs and benefits into the process of setting the NAAQS.

The plain language of the Clean Air Act admits of only one conclusion: the Act precludes EPA from considering costs in

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[25]Cross-petitioners and respondents and amici in support of cross-petitioners appear to disagree both over whether EPA is *required or merely permitted* to consider non-health factors in setting the NAAQS (*compare* ATA Br. 32 *with, e.g.*, American Boiler Mfrs. Am Br. 4) and over *which* non-health factors are to be considered (*compare* ATA Br. 30 (cost-benefit balancing might mean analyzing standard according to "significant risks or other similar rubrics," or according to the quality-adjusted life-years saved by the standard) *with* Hatch Am. Br. 18 ("feasibility concerns would not trump health" under the statute) *and with* Inhofe Am. Br. 10-12 (EPA permitted to consider countervailing health risks, risk significance, cost and technological feasibility)).

setting the NAAQS. "[I]n any case of statutory construction, our analysis begins with the language of the statute . . . . And where the statutory language provides a clear answer, it ends there as well." *Harris Trust & Savings Bank v. Salomon Smith Barney Inc.*, 120 S.Ct. 2180, 2191 (2000), quoting *Hughes Aircraft Co. v. Jacobson*, 525 U.S. 432, 438 (1999) (internal citation and quotation marks omitted). As we explain below, the statutory text alone is clear enough to resolve the issue presented here; that text precludes the cost-benefit balancing cross-petitioners embrace.[26] Where Congress has wanted to include some kind of balancing test in health, safety, and environmental legislation, it has done so clearly, carefully, and with due attention to the specific circumstances at hand. In the Clean Air Act itself, Congress clearly and carefully balanced, or allowed EPA to balance, costs and benefits only when the NAAQS are being implemented, not when they are being set. Cross-petitioners' efforts to force the meaning they desire into the language of the statute must fail.

### A. Sections 108 and 109 of the Clean Air Act Clearly Direct EPA to Consider Only the Effects of Air Pollution on Public Health and Welfare in Setting the NAAQS

Section 109(b)(1) of the Clean Air Act provides that the primary NAAQS are standards "the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health." 42 U.S.C. 7409(b)(1). Secondary NAAQS are those "requisite to protect

[26]Lest there remain any doubt, however, we also offer citations to the legislative history confirming the conclusion that the Clean Air Act precludes the consideration of costs in setting the NAAQS. For a fuller account of the evolution of the NAAQS program in Congress, see MA & NJ Br., No. 99-1257, at 7-19; Clean Air Trust Am. Br., *passim*.



the public welfare"; they do not similarly allow for a margin of safety. 42 U.S.C. 7409(b)(2). In determining what it means to "protect the public health" with an "adequate margin of safety" and what it means to "protect the public welfare," it is crucial to consider the kind of evidence Congress directed EPA to take into account in setting the NAAQS.

Congress directed EPA to set the NAAQS "based on" the air quality criteria. 42 U.S.C. 7409(b)(1)-(2). In formulating the directive in this way in the 1970 amendments, Congress eliminated previous language that had required the states, in setting their own air quality standards, to set standards "consistent with" *both* "the air quality criteria *and* recommended control techniques" HEW had previously been required to issue.[27] Clearly, then, in 1970 Congress was instructing EPA to base the NAAQS on air quality criteria alone. The content of the criteria documents is thus critical to determining the content of the NAAQS.

In section 108(a)(2), Congress supplied the answer to the question concerning the proper scope of the criteria documents in unambiguous terms. This section provides that the air quality criteria are to "reflect the latest *scientific knowledge* useful in indicating the kind and extent of all *identifiable* effects on *public health or welfare* which may be expected *from the presence of such pollutant in the ambient air*, in varying quantities." 42 U.S.C. 7408(a)(2). Thus: air quality criteria are not to be based on *economic* information; the effects of concern are not *costs*; the effects to be discussed are not *theoretical* effects predicted by abstract economic models; and the relevant effects are not those arising from *regulation itself*.

This conclusion is further confirmed by section 108(b)(1). This provision requires EPA, "[s]imultaneously with *the issuance of criteria* under subsection (a) of this section," to issue information on the costs and feasibility of various pollution

[27]Air Quality Act of 1967, Pub. L. No. 90-148, sec. 108(c)(1), § 2, 81 Stat. 485, 492 (emphasis added).

control technologies. 42 U.S.C. 7408(b)(1) (emphasis added). Section 108(b)(1) thus clearly distinguishes the "criteria"-on which NAAQS are to be "based," 42 U.S.C. 7409(b)(2)-from information on economic costs and technological feasibility.

Section 109(a)(1) and 109(b)(1) together also make plain that air quality criteria must discuss only the effects of air pollution on health and welfare, not the effects of regulation on the economic costs of pollution control. In section 109(a)(1), Congress directed the Administrator to issue, within thirty days of December 31, 1970, primary and secondary NAAQS "for each air pollutant for which air quality criteria have been issued prior to such date," 42 U.S.C. 7409(a)(1), and in section 109(b), Congress provided that the new primary and secondary NAAQS were to be "based on such criteria."[28] 42 U.S.C. 7409(b)(1)-(2). The criteria that had been issued prior to the stated date were those issued by the Secretary of HEW under the prior version of the Clean Air Act. In directing EPA to set the new NAAQS based on HEW's criteria documents, Congress explicitly endorsed the documents HEW had so far compiled.

The HEW criteria documents that Congress endorsed confirm the exclusive relevance of scientific evidence of human health effects and the irrelevance of economic effects. HEW opened its 1969 criteria document on particulate matter with the following description of air quality criteria:

> Air quality criteria are an expression of the scientific knowledge of the relationship between various concentrations of air pollutants in the air and their adverse effects on man and his environment. . . . Air quality criteria are descriptive; that is, they describe the effects that have been observed to occur when the ambient air level of a

[28]For air pollutants for which criteria were issued after December 31, 1970, EPA was directed to issue NAAQS simultaneously with those criteria and, again, the NAAQS for such pollutants were to be "based on such criteria." 42 U.S.C. 7409(a)(1), 7409(b)(1).



> pollutant has reached or exceeded specific figures for a specific time period.[29]

In keeping with this understanding of the role of air quality criteria, HEW's criteria discussed scientific research from epidemiological, clinical, toxicological, and meteorological investigations.[30] They discussed effects on human health, including the initiation and aggravation of respiratory diseases including asthma,[31] impairment of the oxygen-carrying capacity of the blood,[32] and premature death,[33] and they discussed these effects only insofar as they were tied to air pollution.[34] HEW's criteria documents did not discuss compliance costs, and they did not discuss effects that arose

[29]*See* NAPCA, HEW, Pub. No. AP-49, Air Quality Criteria for PM 1-1 (1969) (1969 PM Criteria Doc.); NAPCA, HEW, Pub. No. AP-62, Air Quality Criteria for Carbon Monoxide 1-1 (1970) (1970 CO Criteria Doc.); NAPCA, HEW, Pub. No. AP-64, Air Quality Criteria for Hydrocarbons 1-1 (1970) (1970 HC Criteria Doc.); NAPCA, HEW, Pub. No. AP-63, Air Quality Criteria for Photochemical Oxidants 1-1 (1970) (1970 Ozone Criteria Doc.); NAPCA, HEW, Pub. No. AP-50, Air Quality Criteria for Sulfur Oxides 1-1 (1969) (1969 SOx Criteria Doc.); *see also* Pub. Health Service, HEW, Pub. No. 1619, Air Quality Criteria for Sulfur Oxides iv (1967) (1967 SOx Criteria Doc.).

[30]*See, e.g.*, 1967 Sox Criteria Doc., *supra*.

[31]*See* 1970 Ozone Criteria Doc., *supra*, at 10-7.

[32]*See* 1970 CO Criteria Doc., *supra*, at 10-3.

[33]*See* 1967 SOx Criteria Doc., *supra*, at xxix.

[34]*See* 1967 SOx Criteria Doc., *supra*, at liii (graphical depiction of results of studies concerning health and welfare effects of sulfur oxides); 1969 PM Criteria Doc., *supra*, at 188-89 (summary of health effects at various exposure levels); 1970 CO Criteria Doc., *supra*, at 10-7 (table reflecting health effects at various exposure levels); 1970 Ozone Criteria Doc., *supra*, at 10-9 to 10-13 (text and table detailing health and welfare effects associated with different levels of exposure).

from regulation itself rather than from air pollution. Congress's endorsement of HEW's basic approach in the criteria documents compiled as of 1970 thus shows what the criteria on which the NAAQS are to be based should include (scientific research into the health effects of pollution) and what they should not include (economic research into the economic consequences of regulation).[35]

The explicit directive to EPA to base the first NAAQS on HEW's criteria documents also helps to explain the meaning of the "adequate margin of safety" that Congress required for the NAAQS. 42 U.S.C. 7409(b)(1). The concept of a margin of safety as embraced in the Clean Air Act was an outgrowth of HEW's experience in developing the first criteria documents. HEW's review of the scientific literature on the criteria pollutants had revealed a diverse array of harms which occurred at a diverse array of pollution levels.[36] HEW also was convinced that the lowest level at which an air pollutant was shown in scientific research to have caused an adverse public health effect was not necessarily the lowest level at which that pollutant in fact caused such an effect.[37] HEW thus

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[35]Because of the importance of the issues settled therein, copies of all the relevant HEW criteria documents that predate passage of the 1970 Act have been lodged with the Court.

[36]*See* sources cited *supra*, n. 34.

[37]In its 1969 guidelines on developing air quality criteria, HEW explained:

> The exposure levels which have thus far been associated with identifiable effects . . . are not necessarily the lowest levels of exposure that will produce such effects. Nor are those effects necessarily the only ones produced by such exposures. Knowledge of the synergistic effects of air pollutants is limited. So is knowledge of possible long-term genetic effects. . . . In short, air quality criteria cannot be interpreted as threshold values; indeed, for many types of air pollutants, there may not be a threshold of risk to health and the environment. In the evaluation of biological effects of environmental contaminants, whether in the community or occupational environment, accumulating evidence has almost invariably shown that adverse effects can and do occur at exposure levels that at one time were considered "safe."

NAPCA, HEW, Guidelines for the Development of Air Quality Standards and Implementation Plans, *supra*, at 16.



recommended that margins of safety be incorporated in then-existing state air quality standards in order to remedy the problem of under-protection that might otherwise follow from the limits of scientific proof.[38] Congress accepted this recommendation when it required in 1970 that the federal government set ambient air quality standards that allowed "an adequate margin of safety."[39] The requirement that EPA allow an adequate margin of safety in the NAAQS thus signals a congressional embrace of a particular approach towards the scientific uncertainty that inevitably attends estimates of the effects of air pollution, an approach that leans in the direction of stricter rather than more lenient standards where (as they always are) the facts are uncertain.

Congress's embrace of HEW's original criteria also helps to explain the meaning of the "public health" to be discussed in the criteria and protected by the NAAQS. Although Congress in the 1970 Clean Air Amendments shifted from requiring that criteria describe effects on "health and welfare"[40] to requiring

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[38]1969 PM Criteria Doc., *supra*, at 189; *see also* 1970 Ozone Criteria Doc., *supra*, at 10-13; 1970 CO Criteria Doc., *supra*, at 10-6.

[39]The Senate report on the legislation explained that "margins of safety are essential to any health-related environmental standards if a reasonable degree of protection is to be provided against hazards which research has not yet identified." S. Rep. No. 91-1196, 91st Cong., 2d Sess., at 10 (1970).

[40]Air Quality Act of 1967, Pub. L. No. 90-148, sec. 107(b)(1), § 2, 81 Stat. 485, 491.

that they describe effects on "*public* health and welfare," Congress's simultaneous endorsement of the criteria documents already compiled demonstrates Congress's belief that those documents adequately reflected the kinds of human health effects Congress thought relevant to setting the NAAQS. In other words, the insertion of the word "public" before the word "health" did not fundamentally change the nature of the inquiry to be conducted in developing the criteria documents; specifically, it did not change that inquiry from a scientific investigation of the health and welfare effects of pollution into an investigation of the economic costs of regulation. Instead, by targeting public health, Congress simply instructed EPA to target health effects in *populations* rather than in single individuals.

The language of the Clean Air Act also clearly instructs EPA to consider only the effects on human health and welfare that are caused by air pollution, not those that might be caused by regulation itself. In describing the criteria on which the NAAQS are to be based, section 108(a)(2) makes this point plain by instructing EPA to consider only the effects on health and welfare "which may be expected from the presence of [an air] pollutant in the ambient air, in varying quantities." 42 U.S.C. 7408(a)(2). This is a clear directive to EPA to focus on the effects of air pollution, not the effects of regulation.

Elsewhere in the Act, Congress demonstrated that it knew how to tell EPA to look at health and welfare effects arising from causes other than air pollution. Indeed, in the Clean Air Act, Congress invented a new (albeit clunky) phrase–"nonair quality impacts"–to refer to such effects. *See, e.g.*, 42 U.S.C. 7411(a)(1) (defining "standard of performance" for new stationary sources to include consideration of, among other things, "any nonair quality health and environmental impact"); 42 U.S.C. 7509(d)(2) (requiring states that have not attained NAAQS by applicable deadlines to revise SIPs to include measures prescribed by Administrator, including measures feasible "in light of technological achievability, costs,



and any nonair quality and other air quality-related health and environmental impacts"); 42 U.S.C. 7545(k)(1) (directing Administrator, in establishing requirements for reformulated gasoline, to take into account "the cost of achieving such emission reductions, any nonair-quality and other air-quality related health and environmental impacts and energy requirements"). No such reference to "nonair quality" impacts appears anywhere in the statutory provisions relevant to the setting of the NAAQS. Here too, moreover, Congress's endorsement of HEW's original criteria documents is revealing: HEW did not discuss the effects of *regulation* on human health and welfare, it discussed the effects of *air pollution* on human health and welfare.

Consistent with the lessons learned from HEW's experience in developing the original criteria documents, Congress expressly acknowledged the necessity of deference to the Administrator's "judgment" in promulgating any NAAQS based on such criteria. 42 U.S.C. 7409(b)(1-2). HEW's criteria documents testified to the high degree of scientific uncertainty unavoidably surrounding both the assessment of public health effects at varying levels of air pollution and the related task of selecting a level requisite to protect public health. Congress provided procedural and substantive guidance for those administrative actions, yet recognized the Administrator's decisions would ultimately require "judgment."

In directing EPA to set standards to protect the public health and welfare, Congress nowhere added a qualifier based on economics or feasibility. Cross-petitioners no doubt wish that the statute were written differently; they no doubt wish that the statute provided, for example, that NAAQS are standards requisite to protect the public health "in light of economic costs, technological feasibility, or any other factor." But the statute is not so written and the words that Congress in fact used leave no room for cross-petitioners' preferred policy outcome. The Court should, accordingly, decline cross-petitioners' invitation to add to the factors Congress itself has

identified as relevant to the process of setting the NAAQS. *See, e.g., Union Electric Co. v. EPA*, 427 U.S. 246, 257 (1976) (refusing to require Administrator, in reviewing adequacy of SIPs, to consider factors (cost and feasibility) not specified by section 110(a)(2) of Clean Air Act, 42 U.S.C. 7410(a)(2)). This is especially so where, as here, Congress clearly paid close attention to the issue of economic costs and specified that this factor would play an important role, not in the setting of the NAAQS, but in their implementation.

**B. Congress's Explicit Recognition of the Relevance of Costs to the Implementation of the NAAQS Confirms the Irrelevance of Costs to Setting the NAAQS**

The NAAQS themselves do not regulate any source of pollution. Instead, they set the health-based benchmark that the regulation of sources of pollution is to achieve. Pollution sources are regulated under the Act both by the states and by the federal government. In both state and federal regulation of pollution sources, costs and feasibility play a significant role. Moreover, in cases in which efforts to achieve the NAAQS cause significant economic hardship, Congress has provided several specific, targeted escape valves allowing departures from the requirements of the Act.

These features of the Act, discussed in detail below, lead to two important conclusions. First, because so many provisions of the Clean Air Act explicitly require or allow EPA to take costs into account in setting standards under the Act, Congress's failure to explicitly allow EPA to consider costs in setting the NAAQS should be taken as decisive evidence that it meant to preclude such consideration in that process. "[W]here Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion." *GMC v. United States*, 496 U.S. 530, 537-38 (1990) (unanimously



declining to insert deadline into section 110(a)(3)(A) of Clean Air Act, noting Congress's establishment of explicit deadlines elsewhere in Act), quoting *Russello v. United States*, 464 U.S. 16, 23 (1983), quoting *United States v. Wong Kim Bo*, 472 F.2d 720, 722 (5th Cir. 1972). Second, to import the consideration of costs into the process of setting the NAAQS would upset Congress's carefully constructed, and carefully limited, scheme for allowing such economic costs to affect the quality of the ambient air.

The states are the entities primarily responsible for implementing the NAAQS. The states' basic obligation under the Act is to ensure attainment and maintenance of the NAAQS by the relevant deadline; "[s]o long as the national standards are met, the State may select whatever mix of control devices it desires . . ." *Union Electric Company*, 427 U.S. at 266; *see also Train v. Natural Resources Defense Council*, 421 U.S. 60, 79 (1975). The states' deadlines, however, may be extended by the Administrator based in part on the "availability and feasibility of pollution control measures." 42 U.S.C. 7502(a)(2)(A). In numerous ways, moreover, states themselves are encouraged to choose the most cost-effective or least economically disruptive means of achieving the NAAQS. 42 U.S.C. 7410(a)(2)(A) (including "economic incentives such as fees, marketable permits, and auctions of emissions rights" in the list of control measures states may include in their SIPs); 7410(a)(2)(H) (requiring states to provide for revision of their SIPs "as may be necessary to take account of . . . the availability of improved or more expeditious methods of attaining" the NAAQS); 42 U.S.C. 7410(a)(3)(B) (in aftermath of energy crisis of early 1970s, requiring states to determine whether they could revise their SIPs in relation to fuel burning stationary sources without interfering with NAAQS compliance).

In limited circumstances, states may temporarily avoid some of their obligations under the statute in order to prevent significant economic disruption and unemployment. For

example, a Governor may petition the President "to determine that a national or regional energy emergency exists of such severity" that sanctions for excess emissions of sulfur dioxide or nitrogen oxides should be temporarily suspended. 42 U.S.C. 7410(f). Such a suspension may be issued only upon a finding of "high levels of unemployment or loss of necessary energy supplies for residential dwellings" within the vicinity of an affected source. 42 U.S.C. 7410(f)(2). In addition, if a state has submitted a revision to a SIP which has been pending before the Administrator for a year or more, the Governor of that state may temporarily suspend the provisions of the SIP she seeks to revise, *if* the revised SIP meets the requirements of the Act and "is necessary (i) to prevent the closing for one year or more of any source of air pollution, and (ii) to prevent substantial increases in unemployment which would result from such closing." 42 U.S.C. 7410(g)(1). In a similar vein, a Governor may, in cooperation with the President, require the use of locally or regionally available coal or coal derivatives in order to avoid "significant local or regional economic disruption or unemployment." 42 U.S.C. 7425(a)-(b).

The federal government also plays a substantial role in efforts to achieve the NAAQS. EPA sets emissions standards for cars and trucks, major new stationary sources of pollution, and other pollution sources. Although these requirements need not pertain exclusively to the pollutants regulated under the NAAQS program, in practice, those pollutants have been their focus. Congress has allowed or required EPA to consider costs in every one of these standard-setting contexts. *See* 42 U.S.C. 7521(a)(3)(A)(i) (in setting standards for mobile sources, Administrator is directed to give "appropriate consideration" to "cost, energy, and safety factors"); 42 U.S.C. 7545(c)(2)(B) (Administrator may not regulate fuel additive on account of its harm to vehicle emission control systems unless it first does "cost benefit analysis" of such regulation); 42 U.S.C. 7411(a)(1), (b)(1) (for certain categories of new sources, Administrator must set "standards of performance" which take into account



"costs and nonair quality health and environmental impacts and energy requirements"); 42 U.S.C. 7547(a)(3) (in setting deadlines for compliance with emissions standards for nonroad vehicles, Administrator is directed to give "appropriate consideration" to cost); 42 U.S.C. 7571(b) (in setting deadlines for compliance with emissions standards for aircraft, Administrator is directed to give "appropriate consideration" to cost).

Thus both the states and EPA enjoy extensive authority to consider costs in their efforts to achieve air quality meeting the NAAQS. To be sure, neither the states nor EPA has the authority to revise the NAAQS themselves based on costs, or to extend the deadlines for meeting the NAAQS beyond the deadlines and extensions provided in the statute. Only Congress has this authority. A brief review of the history of the NAAQS program in Congress shows that Congress has not hesitated to soften the requirements of the Clean Air Act where it has found this necessary to avoid significant economic disruption. Tellingly, however, Congress has never chosen to avoid such disruption by tinkering with the NAAQS themselves. Hence, in Congress as well as in the states and at EPA, costs find their expression in the implementation rather than in the setting of the NAAQS.

On numerous occasions, Congress has revised the deadlines and implementation strategies required by the Act. *See, e.g.*, Energy Supply and Environmental Coordination Act of 1974, Pub. L. No. 93-319, § 5(a)-(b), 88 Stat. 246, 258 (extending deadlines for motor vehicle emissions standards); *id.* § 4, 88 Stat. at 256-58 (restricting EPA's authority to impose transportation control measures in federal implementation plans and requiring a study of the economic impact of certain transportation control measures); Steel Industry Compliance Extension Act of 1981, Pub. L. No. 97-23, 95 Stat. 139 (allowing, for certain iron- and steel-producing operations, extension of deadline for compliance with emission limitations).

In addition, the extraordinarily detailed nonattainment

provisions Congress added to the Act in 1977 and 1990 reflect just such a consideration of economic costs and feasibility. Congress declined to require immediate strict adherence to deadlines for NAAQS compliance that had since passed. In 1977, for example, Congress instead developed a program that allowed for states to develop nonattainment plans that achieved "reasonable further progress" toward attaining NAAQS. See 42 U.S.C. 7501-7509a. And in 1990, Congress substantially extended (by as much as twenty years) the deadlines for areas that had not yet attained the NAAQS in effect at that time. *See, e.g.*, 42 U.S.C. 7511(a)(1).

In adjusting the deadlines and implementation strategies for meeting the NAAQS, Congress *itself* has balanced the public health and welfare goals of the statute against the economic and technological challenges posed by meeting those goals. *Cf. American Textile Mfrs. Inst. v. Donovan*, 452 U.S. 490, 509 (1981). Congress has concluded that to the extent any such balancing is relevant, its goals are best met by confining the consideration of costs and feasibility to implementation of the NAAQS rather than by basing the setting of the NAAQS on such factors in the first instance.

### C. The Textual Arguments of Cross-Petitioners and Their Supporting Respondents and Amici Are Without Merit

Cross-petitioners and their supporting respondents and amici attempt to smuggle the consideration of costs into the process of setting the NAAQS through several arguments based on the language of the Act. These arguments are exceedingly weak. Indeed, insofar as cross-petitioners and their supporters simply ignore statutory language contrary to their central claim, their arguments border on the wholly frivolous.

*"Public Health."* Cross-petitioners and their supporting respondents and amici argue that the term "public health" imports consideration of compliance costs into the NAAQS-



setting process. This argument is wrong for many reasons.

First, as already discussed, in the 1970 amendments to the Clean Air Act, Congress expressly embraced HEW's approach to describing impacts on public health by requiring that EPA's new NAAQS be based on the criteria documents HEW had already compiled. 42 U.S.C. 7409(a)(1)(A), 7409(b)(1). HEW's approach did not look at the economics of regulation. Instead, it looked at the health effects of air pollution on the human population. Cross-petitioners' interpretation of the words "public health" is inconsistent with Congress's endorsement of HEW's criteria documents.

Moreover, cross-petitioners' interpretation would create an awkward situation in which costs would be relevant to setting the primary NAAQS, but not to setting the secondary NAAQS. Only the primary NAAQS are set according to the requirements of "public health," which, cross-petitioners argue, are determined by looking at costs. 42 U.S.C. 7409(b)(1). Thus, under cross-petitioners' interpretation of the term "public health," EPA is obliged to be cost-conscious in protecting human health, but is not so obliged when protecting the environment through the secondary NAAQS. This interpretation is in considerable tension with Congress's predominant focus on the health effects of air pollution.[41]

Furthermore, cross-petitioners' argument is inconsistent with the text of numerous provisions of the Act. Many provisions of the Act explicitly allow or require EPA to consider *both* economic costs *and* "public health" in setting regulatory standards under the Act. *See, e.g.*, 42 U.S.C. 7502(a)(1), 7502(a)(3)(A)(i) (motor vehicles); 42 U.S.C. 7411(a)(1), 7411(b)(1) (new source performance standards); 42 U.S.C. 7547(a)(1), 7547(a)(3) (nonroad vehicles); 42 U.S.C. 7571(a)(2)(A), 7571(b) (aircraft emissions). *See also* 42 U.S.C.

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[41]Cross-petitioners also argue that the term "welfare" incorporates consideration of costs, but this argument simply ignores critical language in the definition of welfare. See *infra* at 31.

7612(a) (requiring economic impact analysis describing effects of Clean Air Act standards on the "public health" *and* "economy"). If "public health" includes "costs," as cross-petitioners argue, Congress could have rested, in every one of the cited sections, with a simple directive to EPA to consider effects on public health. To paraphrase this Court's decision last Term in *Public Lands Council v. Babbitt*, 120 S.Ct. 1815, 1826 (2000), why would Congress add the words "costs" if (as cross-petitioners' argument implies) they add nothing?[42]

*"Welfare."* Next, cross-petitioners argue that EPA must consider costs in setting the NAAQS because section 108(a)(2)(C) directs EPA to describe, in its criteria documents, "any known or anticipated adverse effects on welfare." 42 U.S.C. 7408(a)(2)(C). Because, they reason, the definition of "welfare" includes "effects on economic values," the criteria documents must describe the compliance costs of regulation. ATA Br. 37-39.

Even if cross-petitioners' interpretation of the word "welfare" were correct (which, as we explain below, it is not), their argument would be irrelevant to EPA's decision to revise the *primary* NAAQS for PM and ozone. Cross-petitioners' erroneous reading of the definition of "welfare" in section 302(h) cannot change the language of section 109(b)(1), which requires primary NAAQS to protect the *public health*. 42 U.S.C. 7409(b)(1). The criteria documents' discussion of effects on welfare is not relevant to setting the primary NAAQS; surely cross-petitioners are not arguing that effects on wildlife, for example, should be considered in setting the primary NAAQS, and yet effects on wildlife are also included in the definition of "welfare." Cross-petitioners' arguments based on the

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[42]*See also Atlantic Mutual Ins. Co. v. Commissioner of Internal Revenue*, 523 U.S. 382, 388 (1998) (declining to accept interpretation of statute that led to redundancy); *United States v. Nordic Village, Inc.*, 503 U.S. 30, 36 (1992) ("a statute must, if possible, be construed in such fashion that every word has some operative effect").



definition of welfare are irrelevant to the primary NAAQS.

In setting the secondary NAAQS for an air pollutant, EPA is explicitly instructed to consider only the effects on welfare *"associated with the presence of such air pollutant in the ambient air."* 42 U.S.C. 7409(b)(2) (emphasis added). Thus, even where secondary NAAQS are concerned, the Clean Air Act makes clear that the only welfare effects that are relevant are those arising from *air pollution*, not those arising from *regulation*.

In any event, cross-petitioners' argument that "welfare" encompasses general economic effects is mistaken. Cross-petitioners can offer this argument only by ignoring critical language in section 302(h)'s definition of "welfare." Section 302(h) provides in full:

> All language referring to effects on welfare includes, but is not limited to, effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being, *whether caused by transformation, conversion, or combination with other air pollutants*.

42 U.S.C. 7602(h) (emphasis added).[43] The last, italicized clause of this definition makes clear that the effects on "welfare" with which Congress was concerned were only the effects *from air pollution*. Cross-petitioners can argue that "welfare" includes the compliance costs of regulation itself only by ignoring the critical last clause of this definition; indeed, they omit this portion of the definition from their brief entirely without any notation, such as an ellipsis, indicating

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[43]The italicized clause was added in 1990, § 109(b), 104 Stat. 2470, to "make[] clear that welfare effects extend to *consequences of air pollutant emissions* that may occur after the pollutant has been chemically altered following its release, and to effects caused by the combined impacts of air pollutants." H.R. Rep. No. 101-490, 101st Cong. 2d Sess. 274 (1990) (emphasis added).

that they have done so. ATA Br. 37-38; *see also* GE Am. Br. 16.[44]

*"Appropriate."* Respondents in support of cross-petitioners argue that cost-benefit analysis is imported into the NAAQS-setting process via the word "appropriate" in section 109(d)(1). App. Pwr. Br. 39-40. Again, however, reading the entire statutory provision at issue serves to defeat respondents' argument. Section 109(d)(1) provides in pertinent part:

> Not later than December 31, 1980, and at five-year intervals thereafter, the Administrator shall complete a thorough review of the criteria published under section 7408 of this title and the national ambient air quality standards promulgated under this section and shall make such revisions in such criteria and standards and promulgate such new standards *as may be appropriate in accordance with section 7408 of this title and subsection (b) of this section.*

42 U.S.C. 7409(d)(1) (emphasis added). Thus "appropriateness" is defined by the requirements of sections 108 and 109(b), which, we have established, do not require or allow cost-benefit balancing.

Furthermore, the word "appropriate" appears only in reference to the revision of an existing NAAQS or the post-1980 establishment of a new NAAQS, not in reference to the setting of the first NAAQS in the 1970s. According to respondents' view that the word "appropriate" has a separate office from the Act's other language, then, the initial NAAQS set in the 1970s must have been governed by a different standard than revisions to the NAAQS. Section 109(b)(1) explicitly rules out such a possibility; it provides that primary

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[44]Cross-petitioners' interpretation of the words "welfare" and "public health" also would render unnecessary section 108(b)(1)'s directive to EPA to furnish information on pollution control costs. 42 U.S.C. 7408(b)(1). If information on costs were a requisite part of the criteria documents, as cross-petitioners argue, then there would have been no need for a separate requirement that EPA develop information on the costs of pollution control.



NAAQS "may be revised in the same manner as promulgated." 42 U.S.C. 7409(b)(1).

*"Adequate margin of safety."* Respondents supporting cross-petitioners argue that Congress must have meant, in requiring a margin of safety, to require EPA to consider costs. App. Pwr. Br. 36. However, as explained above, *supra* at 20-21, Congress required a margin of safety in 1970 in response to HEW's conviction that the lowest levels at which scientific research had shown adverse effects were probably not the lowest levels at which such effects occurred. In its early criteria documents–on which Congress required EPA to base the first NAAQS (42 U.S.C. 7409(a)(1), 7408(b))–HEW had thus recommended a "margin of safety" designed to protect subpopulations more vulnerable to the effects of air pollution than the general population.[45] The requirement of a margin of safety was thus a response to scientific uncertainty, not a way to sneak economic consequences into the setting of the NAAQS.[46]

*"Judgment."* Several amici argue that the word "judgment" in section 109(b)(1) requires EPA to consider costs. GE Am. Br. 13; Hatch Am. Br. 9-10. As we set forth above, however, *supra* at 23, this term signals only Congress's candid recognition of the uncertainties attending decisions about the quality of air requisite to protect the public health. The term cannot fairly be read, notwithstanding amici's claim, to allow the Administrator to consider any factor that she might in her own "judgment" deem relevant. Indeed, that is precisely the

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[45]*See, e.g.*, 1970 Ozone Criteria Doc., *supra*, at 10-13.

[46]The concept of a margin of safety has a long history in toxicology. Toxicologists have long recommended that acceptable daily intakes of toxic substances be determined by dividing by 100 the level at which no adverse human health effects have been found to occur, in order to account for variations in the sensitivity of the human population. *See* National Research Council, *Science and Judgment in Risk Assessment* 29-31 (1994).

kind of fanciful statutory interpretation that, unlike the reading we support, could theoretically raise a nondelegation issue.

*Public comments.* Remarkably, cross-petitioners also argue that the fact that EPA must respond to the public's "written comments, data, or documentary information," 42 U.S.C. 7607(d)(3), means that these comments, data, and information will be "part of the Administrator's decisionmaking data set." ATA Br. 40. That is to say, apparently, the Administrator must consider anything submitted in the public record as relevant to her decision setting the NAAQS. Such a process would allow public commenters to determine the scope and content of EPA's obligations in setting the NAAQS. The proposition is fantastical.

*Information to States on Control Technologies.* Cross-petitioners also assert that costs must be considered in setting the NAAQS because Congress directed EPA to provide information on the costs and feasibility of control technologies in issuing new air quality criteria pursuant to section 108(a). ATA Br. 40. This argument, too, is misguided for several reasons.

As explained above, *supra* at 17, when Congress amended the Clean Air Act in 1970, it eliminated language that had previously required air quality standards to be consistent with both air quality criteria *and* the information on control techniques HEW had been required to provide.[47] Moreover, the Act itself distinguishes the "criteria" on which NAAQS are to be based from the information on control techniques required by section 108(b)(1). 42 U.S.C. 7408(b)(1). Cross-petitioners would undo these careful legislative determinations by contending that the information on control

[47]Air Quality Act of 1967, Pub. L. No. 90-148, sec. 108(c)(1), 81 Stat. 485, 492.



techniques must influence the setting of the NAAQS.[48]

The information on control techniques required by section 108(b)(1) was clearly designed not to affect the NAAQS-setting process, but instead to give the states a running start on developing plans to implement the NAAQS. In requiring that this information be provided to "states and appropriate air pollution control agencies," Congress clearly contemplated that this information would be used by such entities in implementing the NAAQS in timely fashion. 42 U.S.C. 7408(b)(1).[49] Indeed, the state respondents supporting cross-

[48]Cross-petitioners' claim that this Court should import cost considerations into section 109(b) because the statute does not say that the NAAQS should be based "solely" on the criteria (ATA Br. 39) likewise ignores the full language of the statute clearly distinguishing criteria from information on costs, 42 U.S.C. 7408(b)(1); ignores Congress's deliberate decision in 1970 to uncouple the choice of standards from information on costs and feasibility, *see* Air Quality Act of 1967, Pub. L. No. 90-148, sec. 108(c)(1), § 2, 81 Stat. 485, 492; and ignores Congress's ability, demonstrated elsewhere in the Act, to direct EPA to consider costs when it wanted the agency to do so. Congress need not have added the extra word "solely" to add an extra dollop of clarity to an already plain statutory scheme. Cross-petitioners' contrary suggestion is merely a variant of their misguided request for a new canon of statutory construction, discussed *infra* at 39-41.

[49]The Senate Report on the 1970 Amendments explained: "Reports on control techniques, as under existing law, would be issued simultaneously with the publication of criteria. The Committee recognizes that the States will continue to need this information to develop meaningful programs for implementation of ambient air quality standards on a regional basis." S. Rep. No. 91-1196, 91st Cong., 2d Sess., at 9 (1970). Cross-petitioners can see no purpose in EPA's development of information on control costs and technologies, other than to inform the NAAQS-setting process, because they are apparently unable to believe that Congress would want to give the states plenty of time to contemplate their possible regulatory

petitioners recognized this point in the court below. They argued that EPA had erred in failing to provide the information required by section 108(b) with respect to the rules at issue here, complaining that EPA had "side-stepped its responsibility under §108 to assist the States by developing fundamental information, thus making it much more difficult for the States to develop and implement adequate control strategies." State Petitioners' Final Merit Br., at 9, *American Trucking Assns. v. Browner*, No. 97-1440 (D.C. Cir. 1999).

*CASAC advice.* Cross-petitioners also maintain that section 109(d)(2)(C)(iv) imports cost considerations into the NAAQS-setting process. ATA Br. 41. This is plainly wrong. Section 109(d)(2)(C)(iv) requires CASAC to

> advise the Administrator of any adverse public health, welfare, social, economic, or energy effects which may result *from various strategies for* attainment and maintenance of such national ambient air quality standards.

42 U.S.C. 7409(d)(2)(C)(iv) (emphasis added). Cross-petitioners, once again, simply ignore critical language in the statutory text as well as the basic distinction Congress drew between the *setting* and the *implementing* of NAAQS, in which Congress allowed for consideration of costs only with regard to the latter. Section 109(d)(2)(c)(iv) explicitly requires CASAC to report only on the broad implications of *"strategies for"* attainment and maintenance of the NAAQS, not on the implications of the NAAQS themselves. Moreover, CASAC's charge to recommend new or revised NAAQS is explicitly tied to the standard-setting requirements of section 108 and 109(b), 42 U.S.C. 7409(d)(2)(B); nothing in section 109(d)(2)(c)(iv) purports to change those requirements.

*"Productive capacity."* Respondents in support of cross-petitioners also make the far-fetched claim that cost-benefit analysis is required by the Clean Air Act because the preamble

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responses to changes in the NAAQS. ATA Br. 40 (referring to "inexplicably premature" mandate of section 108(b)(1)).



to the Act identifies as one of the purposes of the statute the promotion of "the public health and welfare and the productive capacity of [the nation's] population." App. Pwr. Br. 29, quoting 42 U.S.C 7401(b)(1). This preamble language, which has been unchanged since the 1963 Clean Air Act,[50] does not even remotely support respondents' reading of it. The preamble makes clear that the population's health, welfare, and productive capacity are to be "promote[d]" by *"protect[ing] and enhanc[ing] the quality of the Nation's air resources"*–not by refusing to regulate in the face of demonstrable health risks. 42 U.S.C. 7401(b)(1).

### D. Neither the Nondelegation Doctrine Nor Cross-Petitioners' Proposed Cost-Benefit Canon Can Override the Plain Meaning of the Statutory Language

No doubt insecure about their arguments based on the statutory text, cross-petitioners seek refuge in canons of statutory construction. The first canon cross-petitioners invoke is that of avoiding constitutional invalidation where a constitutional interpretation of a statute is available. The second is a new canon proposed by cross-petitioners which would inject a cost-benefit test into any environmental statute that did not use certain magic words in precluding such a test. Neither canon should be used to defeat the plain meaning of the Clean Air Act.

#### 1. Because There Is No "Grave Constitutional Doubt" About the Clean Air Act, The Court Should Decline Cross-Petitioners' Invitation to Use the Nondelegation Doctrine as an Excuse to Rewrite the Statute

As we discussed in detail in our opening brief in *Browner v.*

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[50] *See* Clean Air Act of 1963, Pub. L. No. 88-206, § 1(b)(1), 77 Stat. 392, 393.

*American Trucking Associations, Inc.*, No. 99-1257, the Clean Air Act, and EPA's interpretation of the Act, are plainly constitutional under this Court's precedents on delegation. MA & NJ Br. 28-43. Moreover, as set forth above, cross-petitioners' proffered interpretation of the Act is inconsistent with the plain meaning of the Act. Thus, by asking this Court to adopt their interpretation of the Act in order to avoid deciding the constitutional issue reached by the court below, cross-petitioners are inviting this Court to rewrite a statute in order to avoid deciding a straightforward and well-settled constitutional issue. The Court should decline to do so.

Just last Term, this Court affirmed "the guiding principle that 'where a statute is susceptible of two constructions, by one of which grave and doubtful constitutional questions arise and by the other of which such questions are avoided, our duty is to adopt the latter.'" *Jones v. United States*, 120 S.Ct. 1904, 1911 (2000), quoting *United States ex rel. Attorney General v. Delaware & Hudson Co.*, 213 U.S. 366, 408 (1909). Cross-petitioners' arguments fail each of the three requirements of the principle stated in *Jones:* as we established above, the Clean Air Act is not susceptible of two constructions; as we set forth in detail in our opening brief in *Browner v. American Trucking Associations*, precluding costs in the setting of the NAAQS does not raise "grave and doubtful constitutional questions"; and, finally, as discussed below, cross-petitioners' proffered interpretation(s) would not even avoid the constitutional question as they present it.

This case is before the Court because the court of appeals created a new requirement in the name of the nondelegation doctrine–one that demands that guidance for administrative action prescribe a quantitative "stopping point" for regulation. U.S. Pet. App. 11a. The problem for cross-petitioners and their supporters is that the various interpretations of the Clean Air Act they offer do not supply such a "stopping point."[51]

[51]Cross-petitioners and their supporters cannot even agree as to whether the Act *permits* or *requires* EPA to consider costs in setting the NAAQS (*compare* ATA Br. 32 *with* Inhofe Am. Br. 10), and thus cannot agree as to whether Congress itself made the most basic choice inherent in health and safety regulation–whether to balance human lives against economic costs. *Cf. Industrial Union Dept., AFL-CIO v. American Petroleum Inst.*, 448 U.S. 607, 672 (1980) (Rehnquist, J., concurring in judgment).



Nowhere do cross-petitioners identify exactly what the cost-benefit balancing they desire would entail. Indeed, they offer the Court a virtual smorgasbord of possibilities (ATA Br. 30), ranging from analysis "under 'significant risk' and similar rubrics" to analysis based on "quality-adjusted life years" to the kind of cost-benefit analysis endorsed in *International Union, United Automobile, Aerospace & Agricultural Implement Workers of America, UAW v. OSHA*, 938 F.2d 1310 (D.C. Cir. 1991), which required "identifying values for lost years of human life and for suffering and other losses from non-fatal injuries." *Id.* at 1320.

Quite apart from the administrative license created by cross-petitioners' failure to choose among the multitudinous ways in which costs can be taken into account in setting regulatory standards, none of cross-petitioners' analytical frameworks, even viewed in isolation, identifies a stopping point for regulation. An instruction from this Court telling EPA to consider quality-adjusted life years rather than lives lost, for example, would not tell EPA *how many* life years it should strive to save. It would, at most, tell the agency not to worry quite so much about the effects of air pollution on the elderly, the disabled, and the ill.

**2. Cross-Petitioners' Proposed Cost-Benefit Canon Cannot Override the Plain Meaning of the Statute and Would Improperly Subvert the Legislative Process**

As much as conceding the weakness of their arguments

based on the statutory language, cross-petitioners and their supporting respondents and amici urge this Court to adopt a new canon of construction. ATA Br. 46-47; App. Pwr. Br. 46-47; GE Am. Br. 18-22. The plainest statement of the content of this new canon appears in General Electric's brief: "[A] federal agency is *required* to consider costs and risk trade-offs in the absence of an express congressional statement *forbidding* the agency from doing so." GE Am. Br. 18. GE submits that this new requirement should apply only to "environmental and other regulatory statutes." *Id.* at 1.

Cross-petitioners and their supporters ask this Court, in other words, to adopt a canon of construction that licenses the rewriting of a particular category of statutes. This is a radical request, and one this Court should roundly reject.

Cross-petitioners' new canon would have this Court ignore the language of the Clean Air Act establishing that Congress deliberately excluded the consideration of costs from the process of setting the NAAQS. Because Congress did not, three decades ago, foresee this new canon and therefore did not then know that it must use certain explicit, magic words in excluding the consideration of costs, Congress's work could be undone. This is not a canon of statutory construction at all; it is a canon of statutory destruction.

Congress itself has, moreover, rejected an interpretive principle like the one recommended by cross-petitioners. Very recently, Congress considered and rejected bills that would have imposed what came to be known as a "supermandate" on agencies charged with protecting human health and the environment. This supermandate, like the canon proposed by cross-petitioners, would have applied a cost-benefit test to federal regulations. *See* H.R. 9, 104th Cong. § 422(a)(2), (b)(1) (March 10, 1995); S. 343, 104th Cong., § 629(a) (1995).[52]

[52]The brief of amici Environmental Defense, *et al.*, provides a detailed discussion of the extensive congressional debates over, and rejection of, generic cost-benefit tests for federal health and environmental regulation.



The question whether to apply a generic cost-benefit test to health and environmental regulation is a public policy decision of the highest order. Congress so far has not embraced such an across-the-board test. This Court should not wade into these politically charged waters by adopting the cost-benefit canon cross-petitioners propose.

## II. Interpreting the Clean Air Act to Preclude the Consideration of Costs in Setting the NAAQS Does Not Lead to Irrational Results

At the end of the day, the real complaint of cross-petitioners and their supporting respondents and amici is that the Clean Air Act does not reflect "wise social policy." App. Pwr. Cross-Pet. 7. Their contention that the law is unwise, however, rests on a mischaracterization of the law in operation and is belied by three decades of success. Their argument, moreover, fundamentally misapprehends the role of this Court in relation to the Congress.

### A. Precluding Cost-Benefit Balancing in Setting the NAAQS Will Not Lead to Deindustrialization

Throughout their briefs, cross-petitioners and their supporting respondents and amici suggest that precluding the consideration of costs in setting the NAAQS will force EPA to set standards for criteria pollutants at zero, thus effectively ending industrial activity in this country. They believe this result follows from the "nonthreshold" character of the criteria pollutants. Their argument betrays a deep misunderstanding of the concept of a nonthreshold pollutant. As a consequence, cross-petitioners seriously misrepresent EPA's degree of authority under the statute.

Cross-petitioners implicitly embrace a conception of

nonthreshold pollutants as pollutants that *have* been shown *not* to have a threshold, that is, pollutants that have been shown to have adverse effects on human health or the environment at every nonzero level. This is not EPA's conception of a nonthreshold pollutant.

When EPA discusses the possibility that particulate matter and ozone are nonthreshold pollutants, it is referring to the fact that these pollutants have *not* been shown to *have* a threshold, that is, it has not been demonstrated that these pollutants cease to have adverse effects on human health or the environment below a certain level. EPA does not claim to have proven that PM and ozone have adverse effects on human health at every nonzero level. *See* NAAQS for Ozone, 62 Fed. Reg. 38,856, 38,863 (1997); NAAQS for PM, 62 Fed. Reg. 38,652, 38,674-75 (1997). Thus, when EPA discusses the possibility that these are "nonthreshold" pollutants, it is referring to a *lack* of evidence that there *is* a threshold.

This *lack* of evidence would *not* be sufficient to support a NAAQS. The Clean Air Act requires the Administrator to present evidence of harm before she may set or revise the NAAQS. She may not set the NAAQS based on the *lack* of evidence of *no* harm. Section 108(a)(2) makes this point plain: the criteria on which the NAAQS are to be based must describe "all *identifiable* effects on public health or welfare." 42 U.S.C. 7408(a)(2) (emphasis added). Indeed, if EPA were allowed to set the NAAQS based on the lack of evidence of no harm, there would be no need to develop criteria documents at all, because EPA would not be required to show health effects before regulating. In such a regime, it would presumably be up to the regulated community to show the harmlessness of air pollution, rather than being up to the government to show its harmfulness. This is not the regulatory regime created by the Clean Air Act.[53]

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[53]In contrast, in *Industrial Union Dept., AFL-CIO v. American Petroleum Institute*, 448 U.S. 607 (1980), this Court addressed the Occupational Safety and Health Administration's "cancer policy," which presumed that no safe level of carcinogenic substances existed and required workplace standards to be set based on this presumption. *Id.* at 624. EPA has not adopted this kind of presumption in setting the NAAQS.



As a consequence, cross-petitioners' claim that EPA is required to set pollutant levels at zero when faced with a nonthreshold pollutant is mistaken. ATA Br. 25. EPA is not required to set the NAAQS at zero for such pollutants because nonthreshold pollutants are not what cross-petitioners claim them to be; they are not pollutants that have been shown to be harmful at all nonzero levels, they are pollutants that have not been shown to be harmless at all nonzero levels. Indeed, if EPA did indeed attempt to set a NAAQS based on the lack of evidence of harmlessness rather than based on affirmative evidence of harmfulness, we expect that cross-petitioners would be first in line to challenge the agency's decision.

**B. Precluding EPA from Considering Costs in Setting the NAAQS Does Not Allow the Administrator Privately to Consider Costs While Publicly Denying It**

Cross-petitioners argue that EPA should be required to consider costs in setting the NAAQS because this would simply formalize an informal system that has developed in which the Administrator privately considers costs in setting the NAAQS while publicly denying she is doing so. ATA Br. 43-45. Their evidence for this allegation of unspoken but routinized illegality is altogether unpersuasive.

In addition to engaging in rank speculation about what Administrator Browner's private thoughts might have been during the PM and ozone rulemakings at issue here, ATA Br. 44, cross-petitioners assert that Administrators Costle and Ruckelshaus considered costs in NAAQS rulemakings

undertaken during their tenures at EPA. But both Costle[54] and Ruckelshaus[55] were careful to ensure that their final decisions were not based on statutorily proscribed factors.

In both instances, to be sure, as cross-petitioners' sources note, the Administrator (or, in Ruckelshaus's case, EPA staff) had before him information on the costs of implementing the standards he was in the midst of setting.[56] This demonstrates nothing. In NAAQS rulemaking proceedings, EPA is commonly confronted with information on costs even though it has repeatedly denied the relevance of this information.[57] Moreover, EPA is charged at once with setting and with implementing the NAAQS. As emphasized throughout this brief, it is perfectly appropriate for EPA to consider costs in implementing the NAAQS. Because the process of implementation begins straight on the heels of setting the NAAQS, an Administrator will naturally have before her information on the implementation of standards even as she sets them. Indeed, as cross-petitioners have emphasized, EPA

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[54]Mark K. Landy, *et al.*, *The Environmental Protection Agency: Asking the Wrong Questions from Nixon to Clinton* 70 (1994). Indeed, Costle rejected the standard recommended by economic advisors hostile to the Clean Air Act's prohibition on the consideration of costs. As Landy, whose account of Costle's deliberations forms the basis of cross-petitioners' speculations, summarized it: these economic advisors "could argue about the statute as much as they wanted, Costle felt, but they could not fault him for following it." *Id.* at 73.

[55]ATA Br. 44.

[56]*See* Landy, *supra*, at 67-70 (Costle's decision); Thomas O. McGarity, *Reinventing Rationality* 47-48 (1991) (Ruckelshaus's decision).

[57]In fact, respondents and amici supporting cross-petitioners obtain their outsized estimates of the costs and other consequences of the revised PM and ozone NAAQS from comments placed in the docket in the rulemakings at issue here. *See* App. Pwr. Br. 4, n. 4; *id.* at 18, n. 45; GE Am. Br. 9.



must issue information on the costs and feasibility of control measures "simultaneously with" issuing the criteria documents on which the NAAQS are based. 42 U.S.C. 7408(b)(1).

So long as, in setting the NAAQS, the Administrator excludes the cost information from her determination, the statutory mandate is satisfied. There is absolutely no grounds in the record before this Court to presume that any Administrator has ever violated that clear duty.

Equally important, the possibility that an Administrator will act unlawfully by considering factors that are statutorily proscribed is not reason to rewrite a statute to take account of those factors. If an Administrator were ever to consider statutorily proscribed factors in setting a NAAQS, resort could be had to the judicial process and to the standard allowing an agency action to be overturned if "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." Administrative Procedure Act, 5 U.S.C. 706(2)(A).

### C. Congress Acted Rationally in Precluding EPA from Considering Costs in Setting NAAQS While Allowing EPA to Consider Costs in Implementing Them

Respondents argue that precluding the consideration of costs in setting the NAAQS defeats the public-health purposes of the Act by imposing regulatory costs that harm people's health. App. Pwr. Br. 18. In addition, cross-petitioners assert that EPA cannot reasonably maintain a distinction between the consideration of costs in setting the NAAQS and the consideration of costs in implementing them. ATA Br. 45-47. Neither claim has merit. Not only did Congress sensibly address the potential tradeoffs between regulatory costs and health, but the distinction between setting the NAAQS and implementing them has served federal air pollution control efforts well.

Respondents and amici supporting cross-petitioners seek to

convince this Court that interpreting the Act to forbid EPA to consider the health effects of the economic consequences of regulation in setting the NAAQS would be irrational. In fact, their briefs repeatedly suggest that people will die if EPA is allowed to set the NAAQS without balancing costs against benefits. According to the respondents and amici supporting cross-petitioners, anywhere from approximately 3,000 to 27,000 people will die as a result of the *costs* of the revised PM and ozone standards.[58]

There is not one bit of empirical evidence supporting these outlandish claims. Cross-petitioners' supporters cite no empirical study on the effect of the costs of any actual regulation on human health, let alone any empirical study on the effect of the cost of *these* standards on human health.[59] Instead, they refer to two sets of controversial studies which, based on abstract, theoretical economic models, purport to find a generalizable relationship between regulatory costs and human mortality. These studies are filled to the brim with controversial assumptions about the income-depressing effects of regulation, the effects of wealth on health, and even the value of a human life.[60]

Suffice it to say that respondents' and amici's unqualified assertions about the relationship between the costs of public

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[58]*See* Mercatus Center Am. Br. 19 n. 14; App. Pwr. Br. 18.

[59]Indeed, respondents' risk estimates are based on cost estimates that themselves are wholly unsubstantiated. App. Pwr. 18 n. 45.

[60]Respondents and amici rely on: Ralph L. Keeney and Kenneth Green, *Estimating Fatalities Induced by Economic Impacts of EPA's Ozone and Particulate Standards* (1997) (unpublished paper available on web page of Reason Public Policy Institute); Ralph L. Keeney, *Mortality Risks Induced by Economic Expenditures*, 10 RISK ANALYSIS 147 (1990); and Randall Lutter, John F. Morrall, III, & W. Kip Viscusi, *The Cost-Per-Life-Saved Cutoff for Safety-Enhancing Regulatons*, 37 ECON. INQUIRY 599 (1999).



health regulation and public health itself are subject to extremely serious empirical and normative criticisms. However, this Court is not the forum for resolving these complex empirical and normative issues; rather, Congress is the "preferable forum for comprehensive investigations and judgments of social value." *Pegram v. Herdrich*, 120 S.Ct. 2143, 2150 (2000). And, in the Clean Air Act, Congress has resolved these issues by prohibiting EPA from considering costs in setting the NAAQS but allowing the agency to consider costs in implementing them. Indeed, Congress specifically provided limited, targeted escape valves allowing departures from the requirements of the Act where significant economic disruptions or unemployment would otherwise result. *See, e.g.*, 42 U.S.C. 7410(f)-(g). This was a perfectly reasonable and rational response to the complex empirical and normative issues raised by the prospect that ceasing economic activity that "endanger[s] public health and welfare," 42 U.S.C. 7408(a)(1)(A), might lead to a loss in income.

Congress's distinction between the factors relevant to setting the NAAQS and those relevant to implementing them is similarly reasonable. Contrary to cross-petitioners' claims, the Clean Air Act's NAAQS program has been a large-scale success. From a purely environmental perspective, the program has resulted in a substantial absolute reduction in emissions of almost all of the criteria pollutants.[61] But what is most striking is that these reductions have occurred alongside significant increases in population and economic activity. The quality of the ambient air Americans breathe every day has improved dramatically while the economy has expanded and our national wealth has increased. In the absence of the controls imposed by the Clean Air Act, those increases in economic activity would undoubtedly have been accompanied by a significant worsening of air quality.

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[61]*See* Andrews, *Managing the Environment, Managing Ourselves*, *supra*, at 280.

Even from the perspective of a traditional economic analysis, the success of the Clean Air Act cannot fairly be gainsaid. According to EPA's peer-reviewed economic analysis, the reductions in emissions of air pollutants have most likely produced *trillions of dollars* more in benefits than they have imposed in costs.[62] A congressionally mandated study of the Clean Air Act's benefits and costs, published last year, anticipates that the benefits of the Act between 1990 and 2010 will exceed the costs by a ratio of 4 to 1.[63]

The Clean Air Act reflects Congress's central insight that the best way to achieve such dramatically positive results was *not* to base the nation's objectives for environmental quality on prospective cost-benefit analysis. Congress understood the pitfalls presented by basing environmental objectives on cost-benefit analysis in the first instance rather than taking such concerns dynamically into account at later stages, while implementing controls to achieve those objectives.

Because of the proclivity of cost-benefit analysis for quantification and commensuration, cost-benefit analysis tends to highlight those costs and benefits that can be both quantified and stated in terms of a common metric, such as dollars. It follows that cost-benefit analysis tends to underrate those things that cannot be so quantified and monetized; it tends, in Professor Tribe's famous formulation, to "dwarf[] soft variables."[64]

This feature of cost-benefit analysis makes it a particularly unhelpful analytical framework for setting air quality standards under the Clean Air Act. While a retrospective cost-benefit analysis may, like that done with respect to the Clean

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[62]*See* EPA, *The Benefits and Costs of the Clean Air Act, supra*, at ES-8.

[63]EPA, *The Benefits and Costs of the Clean Air Act 1990 to 2010*, v (1999).

[64]Laurence H. Tribe, *Ways Not to Think About Plastic Trees: New Foundations for Environmental Law*, 83 Yale L.J. 1315, 1318-19 & n.25 (1974).



Air Act, demonstrate the wisdom of policy choices decades after those choices were made, a prospective cost-benefit analysis might have discouraged a policymaker from making those very same choices in the first instance.

On the cost side, for example, it is very difficult accurately to estimate the consequences of a *technology-forcing* regulatory requirement before that requirement has forced any technology. It is much easier to assume that the technology used to implement the new requirement will be the same as, and cost as much as, the technology that existed before the requirement was imposed. And indeed, this is the approach taken by EPA when it has, as it is obliged to do by Executive Order, tried to estimate the costs of the NAAQS. With respect to the rules at issue here, EPA thought its cost estimates would prove significantly overstated because of the likely effects of technological innovations.[65] But it could not quantify these effects, and so they do not show up in its economic analysis.

Likewise, with respect to benefits, the empirical and normative complexity of quantifying and monetizing the benefits of good health, long life, and fresh air are well known. When these benefits cannot be quantified or monetized, they do not amount to much in cost-benefit analysis.[66] Even when they can be both quantified and monetized, an important normative shift occurs when the analyst begins to ask not how clean must the air be to protect public health but how much

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[65]*See* Office of Air Quality Planning and Standards, Environmental Protection Agency, Regulatory Impact Analyses for the Particulate Matter and Ozone NAAQS and Proposed Regional Haze Rule at 9-2 to 9-4 (1997).

[66]*See, e.g., Corrosion Proof Fittings v. EPA*, 947 F.2d 1201, 1219 (5th Cir. 1991) (dismissing importance of unquantified benefits of banning asbestos in course of disapproving EPA's cost-benefit analysis of the ban).

would citizens pay to make it so.[67]

Under the Clean Air Act, then, prospective cost-benefit analysis of the kind cross-petitioners endorse would tend to have the following effect: it would tend to overestimate costs (because it could not adequately account for technological innovation) and underestimate benefits (because so many important things cannot be counted). The result would likely be a systematic tendency toward underprotection of the health and welfare central to the Act.

Congress decided in the 1970 Clean Air Act to respond to the inherent uncertainties of cost-benefit analysis and its tendency to compromise environmental objectives by excluding its consideration from the setting of NAAQS. No doubt this was "drastic medicine,"[68] but Congress had declared a "war against air pollution,"[69] and it knew that wars are not won by setting one's sights as low as possible.

Of course, the question before the Court is not ultimately whether the Court believes, as we do, that Congress acted wisely in 1970 in deliberately deciding not to compromise its national goals for clean air based on cost-benefit analysis. For the Constitution wisely entrusts Congress with the responsibility for making those important policy determinations. Cross-petitioners' exclusive remedy remains now, as it has been for the past thirty years, in the legislature and not the courts.

## CONCLUSION

The judgment of the court of appeals should be affirmed insofar as the court held that the Clean Air Act precludes EPA from considering costs in setting the NAAQS.

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[67] *Cf.* Tribe, *supra*, at 1329-32.

[68] 116 Cong. Rec. 32, 904 (Statement of Sen. Muskie).

[69] H.R. Rep. No. 91-1146, at 1 (1970).

Respectfully submitted.

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